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Miles Laboratories Inc. v. Shandon Inc. (CA FC) 27 USPQ2d 1123 (6/14/1993)

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Miles Laboratories Inc. v. Shandon Inc. (CA FC) 27 USPQ2d 1123

Miles Laboratories Inc. v. Shandon Inc.**U.S. Court of Appeals Federal Circuit****27 USPQ2d 1123**

Decided June 14, 1993

Nos. 92-1358, -1357

Headnotes**JUDICIAL PRACTICE AND PROCEDURE****1. Procedure -- Judicial review -- Standard of review -- Patents --**

Appellate review of federal district court's findings of fact in patent infringement action is under "clearly erroneous" standard, and district court's legal conclusions will be accepted unless incorrect as matter of law; appellate court will not reverse simply because it would have decided case differently.

PATENTS**2. Patentability/Validity -- Specification -- In general -- (§ 115.1101)**

"Distinctly claiming" requirement of 35 USC 112, paragraph 2, means that claims must have clear and definite meaning when construed in light of complete patent documents; test for definiteness is whether one skilled in art would understand bounds of claim when read in light of specification, and degree of precision necessary for adequate claims depends upon nature of subject matter.

3. Infringement -- Construction of claims -- (§ 120.03)

JUDICIAL PRACTICE AND PROCEDURE

Procedure -- Judicial review -- Standard of review -- Patents (§ 410.4607.09)

Claim interpretation, as first step in two-part determination of whether infringement occurred, proceeds as question of law, but if trial court resolves factual disputes underlying meaning of claim terms, then those findings are reviewed on appeal under "clearly erroneous" standard.

PATENTS

4. Infringement -- Construction of claims (§ 120.03)

Infringement -- Literal infringement

Patent construction -- Claims -- Defining terms (§ 125.1305)

Federal district court, in considering claims for light microscopy processing apparatus, properly construed term "cabinet" to mean single enclosure for various parts of apparatus, but court clearly erred in finding that accused device, which consists of three cabinets, literally infringes single cabinet limitation of patent in suit.

5. Infringement -- Doctrine of equivalents -- In general (§ 120.0701)

Federal district court did not err in determining that accused device for light microscopy processing apparatus infringed under doctrine of equivalents, even though defendant contends that intended result of patent in suit is unification of various components in single cabinet, while accused device achieves safety and operational advantages by separating components, since infringement under doctrine of equivalents does not vanish merely because accused device performs functions in addition to those performed by claimed device, since accused device, regardless of its separation of components into modules, still achieves substantially same result as patent in suit, and since allowing defendant to escape infringement simply through its use of separate cabinets would cause injustice that doctrine of equivalents is designed to prevent.

6. Patentability/Validity -- Obviousness -- Secondary considerations generally (§ 115.0907)

Objective indicia of non-obviousness weigh in favor of finding of non-obviousness, although lack of such evidence does not weigh in favor of obviousness.

7. Patentability/Validity -- Obviousness -- Relevant prior art -- Particular inventions _
(§ 115.0903.03)

Federal district court did not err in finding claims for light microscopy processing method to be invalid for obviousness, in view of evidence demonstrating that differences between prior art and patent in suit were minor and achievable by simple modification, and demonstrating that prior art references collectively suggest engineering necessary to achieve these modifications, and in view of plaintiff's failure to show any objective indicia of non-obviousness.

Particular patents -- General and mechanical -- Light microscopy

Re. 29,073 (3,892,197), Kinney and Pickett, light microscopy processing apparatus, holding of validity and infringement affirmed.

Particular patents -- Chemical -- Light microscopy

4,001,460, Kinney and Pickett, light microscopy processing method, holding of invalidity affirmed.

Case History and Disposition:

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Appeal from the U.S. District Court for the Western District of Pennsylvania, Diamond,

Action by Miles Laboratories Inc. and Triangle Biomedical Equipment Inc. against Shandon Inc. and Shandon Southern Products Limited, for patent infringement. From federal district court decision holding one patent in suit invalid for obviousness, and holding other patent valid and affirmed, parties cross-appeal. Affirmed.

Attorneys:

Arnold Sprung, of Sprung Horn Kramer & Woods (Nathaniel D. Kramer, with him on brief), Tarrytown, N.Y., for plaintiffs.

Robert D. Yeager, of Kirkpatrick & Lockhart (Christine R. Ethridge and Melvin C. Snyder, III, with him on brief), Pittsburgh, Pa., for defendants.

Judge:

Before Smith, senior circuit judge, and Plager and Rader, circuit judges.

Opinion Text

Opinion By:

Rader, J.

Miles Laboratories, Inc. and Triangle Biomedical Equipment, Inc. sued Shandon Inc. and Shandon Southern Products Limited, for infringement of U.S. Patent Reissue No. 29,073, entitled

"Light Microscopy Processing Apparatus" ('073), * and U.S. Patent No. 4,001,460, entitled "Light Microscopy

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Processing Method" ('460). The United States District Court for the Western District of Pennsylvania held claims 1, 2, and 4-7 of the '460 patent invalid for obviousness, sustained the validity of the '073 patent, and found infringement of both patents. *Miles Lab., Inc. v. Shandon, Inc.*, No. 86-2404 (W.D. Pa. Mar. 11, 1992) (*Miles I*); *Miles Lab., Inc. v. Shandon, Inc.*, No. 86-2404 (W.D. Pa. Apr. 14, 1992) (*Miles II*). Because the record adequately supports the district court's decision, this court affirms.

BACKGROUND

Tissue processing is the treatment of tissue specimens to facilitate viewing them under a microscope. The process exposes the tissue specimens to a series of chemical solutions (reagents) in sequence. The '460 patent claims a method and the '073 patent an apparatus for tissue processing. Except for the claims, the two patents have identical specifications.

Under the method accomplished by the apparatus, a central processing chamber confines the tissue specimens under a sealed cover where they remain fixed during treatment with various fluids and paraffin. Once embedded in paraffin, the specimens can be sliced into very thin sections for microscopic viewing. The treatment takes place when a vacuum draws the fluids and paraffin into the central chamber. After proper exposure, pressure in the central chamber expels the fluids back to their storage containers. Thus, the entire processing occurs without tampering with the tissue specimens.

In 1986, Miles sued Shandon for infringement of both patents. The district court held a bench trial in 1988. The district court determined that the doctrine of laches did not bar this action and that claim 1 of the '460 patent was invalid under 35 U.S.C. Section 103. *Miles I*, slip op. at 30. The district court also upheld the validity of the '073 patent and found infringement of both patents. *Id.*

Later, the district court clarified its earlier decision and added the '460 patent's dependent claims 2 and 4-7 to its obviousness ruling. *Miles II*, slip op. at 1. In addition, the district court enjoined Shandon from further infringement of the '073 patent. *Id.* Shandon appeals the validity determination on the '073 patent and the infringement rulings. Miles cross-appeals the invalidity determination on the '460 patent.

DISCUSSION Standard of Review

This court reviews the district court's fact finding under the "clearly erroneous" standard of Rule 52(a):

Findings of fact, whether based on oral or documentary evidence, shall not be set aside unless clearly erroneous, and due regard shall be given to the opportunity of the trial court to judge of the credibility of the witnesses.

Fed. R. Civ. P. 52(a) (1988); see *Heisig v. United States*, 719 F.2d 1153, 1158 (Fed. Cir. 1983). This court accepts the legal conclusions of the district court unless incorrect as a matter of law. *Id.*

[1] This court does not review *de novo* proceedings of the district court. *Medtronic, Inc. v. Daig Corp.*, 789 F.2d 903, 904, 229 USPQ 664, 666 (Fed. Cir.), cert. denied, 479 U.S. 931 (1986). To win reversal, a party must show that the district court committed reversible legal error or relied upon factual findings which were clearly erroneous in light of the trial record. *Id.* at 904-05. In addition, the "clearly erroneous" standard does not entitle this court to reverse the district court's finding simply because it would have decided the case differently. *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1375, 231 USPQ 81, 87 (Fed. Cir. 1986), cert. denied, 480 U.S.

947 (1987). Where the factfinder's account of the evidence is plausible in light of the entire record or where it chooses one of two permissible views of the evidence, it has committed no clear error. *Id.*

The '073 Patent

On the last day of trial, Shandon moved to introduce an infringement defense that the '073 patent was invalid for indefiniteness under 35 U.S.C. Section 112, Para. 2 (1988). The district court, however, upheld the validity of the '073 patent. On appeal, Shandon alleges the claims of the '073 patent omit the requirement for "vented" solution containers and therefore do not distinctly claim the disclosed invention.

Validity

[2] Shandon challenged the claims of the '073 patent as indefinite under Section 112, Para. 2. Compliance with Section 112, Para. 2 is a question of law. *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986). Section 112, paragraph 2, states:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

35 U.S.C. Section 112, Para. 2. The "distinctly claiming" requirement means that the claims must have a clear and definite meaning when construed in the light of the complete patent document. *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 452, 227 USPQ 293, 296 (Fed. Cir. 1985). Section 112 thus ensures definiteness of claim language. *See In re Zletz*, 319, 322, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

The test for definiteness is whether one skilled in the art would understand the bounds of the claim when read in light of the specification. *Orthokinetics*, 806 F.2d at 1576. If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, Section 112 demands no more. *Hybritech*, 802 F.2d at 1385. The degree of precision necessary for adequate claims is a function of the nature of the subject matter. *Id.*

At trial, a Miles expert, Mr. Kocsis, stated:

Q Now, reading these claims [of the '073 patent], which we have just discussed, did you see any mention in any of these claims of vented containers or reagent bottles, or anything like that?

A No, I did not.

...

Q Now, that single machine, as described in the '460 and '073 patents, requires that a vent to atmosphere be present in each solution container in order for the machine to transfer solutions from a solution container to a processing chamber and back, is that correct?

A That's correct.

Relying on these isolated statements, Shandon contends that the claims do not specify vented solution containers. Without vented containers, Shandon contends, the claims do not describe a workable invention. Without vents, Shandon asserts, the invention cannot change pressure to draw fluids into and out of the central treatment chamber.

Shandon's argument is irrelevant to definiteness under Section 112, Para. 2. The invention's operability may say nothing about a skilled artisan's understanding of the bounds of the claim. Shandon's argument is possibly relevant, however, to the enablement requirement of Section 112, Para. 1, or to utility under Section 101.

Construed as a challenge to utility or enablement, Shandon's argument nevertheless fails. Mr. Kocsis testified that the claimed tissue processors would operate with or without vents in the solution containers. Without vents, collapsible solution containers could permit the transfer of fluids by pressure changes. The district court correctly concluded that "the record shows that even unvented containers would be operative." *Miles II*, slip op. at 4. Thus Shandon did not show a lack of utility, even if the claims cover only unvented containers.

The trial court also determined that the claims, read in light of the specification, covered both unvented containers and vented containers. In fact, the preferred embodiment described in the specification discloses "vented" solution containers:

Referring again to FIG 3, the previously referred to solution containers 15 (with operating numbers 1 through 10) have respective caps 55 for refilling the containers. Suitable air vents 56, indicated by dashed lines, are provided in each cap 55, but are preferably kept extremely small so as to limit any admission of moisture.

Col. 6, lines 3-9. Therefore, the claims read in light of the specification reasonably apprise those skilled in the art of the claimed invention. Moreover, the record shows that the patent disclosed adequate information to enable a skilled artisan to make and use the claimed invention. *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 941, 15 USPQ2d 1329 (Fed. Cir.), *cert. denied*, 498 U.S. 920 (1990).

Appellant incorrectly characterized its validity challenge as a claim definiteness issue -- a characterization which the district court followed, at least in name. Nonetheless, the district court made proper findings and correctly concluded that appellant did not rebut the presumed validity of the claims.

Infringement

The district court determined that the accused devices, known as the HYPERCENTER and the HYPERCENTER 2, infringed the '073 patent literally, or in the alternative, under the doctrine of equivalents. *Miles I*, slip op. at 28-30. On appeal, Shandon argues that the district court misconstrued the "cabinet" limitation of the claims.

[3] This court reviews a trial court's infringement findings under the "clearly erroneous" standard. *Charles Greiner & Co. v. Mari-Med Mfg., Inc.*, 962 F.2d 1031, 1034, 22 USPQ2d 1526, 1528 (Fed. Cir. 1992); *Insta-Foam Prods., Inc. v. Universal Foam Sys., Inc.*, 906 F.2d 698, 702, 15 USPQ2d 1295, 1297 (Fed. Cir. 1990). Claim interpretation

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is the first step in the two-part infringement determination. *Greiner*, 962 F.2d at 1034. Claim interpretation proceeds as a question of law. *Id.* When a trial court, however, resolves factual disputes underlying the meaning of claim terms, this court reviews these findings under the clearly erroneous standard. *Id.* In interpreting disputed claim terms, the trial court considers the specification and the prosecution history. *Id.* After interpreting the claim, the final step of the infringement analysis determines whether the accused device is within the scope of the claim. *Id.* To infringe, an accused device must embody exactly each claim limitation or its equivalent. *Id.*

The district court determined that the HYPERCENTERS contained every limitation set forth in claim 1 of the '073 patent. *Miles I*, slip op. at 28. In reaching this conclusion, the district court

construed the cabinet limitation of claim 1 to define an enclosure for the various elements of the processing apparatus. *Id.* The court also determined that the HYPERCENTERS consisted of three modules: a module which housed the operating controls, a module which housed the reagent storage bottles, and a module which contained the central processing chamber and the paraffin baths. The district court concluded that the separate modules of the HYPERCENTER collectively formed a cabinet. *Id.*

[4] The district court properly construed the term "cabinet" to mean a single enclosure for the various parts of the apparatus. The claims, specification, and drawings disclose a single cabinet enclosing the tissue processing apparatus. The embodiment illustrated in the patent specification disclosed a single cabinet comprised of a number of sections, including numerous reagent bottles, a processing chamber, paraffin containers, and a control module. Moreover, Webster's defines "cabinet" as "1 a case or cupboard with drawers or shelves for holding or storing things . . . 2 a boxlike enclosure." *Webster's New World Dictionary*, 193 (3d col. ed. 1988).

The HYPERCENTERS, however, consist of three modules as opposed to one. "Module" is defined as "any of a set of units, as cabinets, designed to be arranged or joined in a variety of ways." *Webster's* at 872. Because three does not equal one, the district court clearly erred in finding that the HYPERCENTERS (consisting of three cabinets) literally infringed the single cabinet limitation of the '073 patent.

[5] This court, however, concludes that the district court did not err in determining that the HYPERCENTERS infringed the '073 patent under the doctrine of equivalents. Infringement under the doctrine of equivalents requires a showing that the accused device performs substantially the same function, in substantially the same way, to achieve substantially the same result as the claimed device. *Malta v. Schulmerich Carillons, Inc.*, 952 F.2d 1320, 1325, 21 USPQ2d 1161, 1165 (Fed. Cir. 1991), *cert. denied*, 112 S. Ct. 2942 (1992) (citing *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 608 [85 USPQ 328] (1950)).

The doctrine of equivalents prevents the pirating of the patentee's invention in the absence of literal infringement when liability is nevertheless warranted. *Hormone Research Found., Inc. v. Genetech, Inc.*, 904 F.2d 1558, 1564, 15 USPQ2d 1039, 1044 (Fed. Cir. 1990). The doctrine of equivalents thus prevents the risk of injustice that may result from a limited focus on words alone. *Laitram Corp. v. Cambridge Wire Cloth Co.*, 863 F.2d 855, 856-57, 9 USPQ2d 1289, 1291 (Fed. Cir. 1988), *cert. denied*, 490 U.S. 1068 (1989).

Shandon argues that the district court did not determine that the HYPERCENTERS achieved "substantially the same result" as the '073 patent. Shandon contends that the intended result of the '073 patent is unification of the various components. Shandon alleges that HYPERCENTERS achieve safety and operational advantages by separating the components.

The '073 patent achieves an enclosed tissue processing system. The district court stated:

The '073 patent discloses an *apparatus* for fixing and processing the tissue specimens. It is an improvement over the prior art because it represents the first completely automatic system for allowing light microscopy tissue to be processed under a completely automatic sequence in an entirely closed system and without requiring substantial movement of the specimens.

Miles I, slip op. at 3-4 (citation omitted). This result does not change merely because Shandon separated certain components of the system into discrete modules.

In addition, the '073 patent does not specify that the cabinet contains all components of the invention. Rather claim 1 specifies an "air pump means . . . mounted proximate said cabinet." The '073 patent, col. 11, lines 17-19. Claim 1 also claims "electrical control means . . . mounted proximate said chamber." *Id.* col. 12, lines 1-3. Therefore, although

claim 1 may have a cabinet limitation, not all components of the tissue processor must be within the cabinet. Indeed, the specification states that "the controls could be mounted in a separate cabinet." *Id.* col. 10, lines 34-35.

The limitations and functions of the invention in the claims, not the elements or functions of the accused device, establish the reference point for the doctrine of equivalents. *Insta-Foam*, 906 F.2d at 702. Infringement under the doctrine does not vanish merely because the accused device performs functions in addition to those performed by the claimed device. *Id.* Regardless of separation into modules, Shandon's system is still a "completely automatic system for allowing light microscopy tissue to be processed under a completely automatic sequence in an entirely closed system and without requiring substantial movement of the specimens." *See Miles I*, slip op. at 3-4. Thus, the HYPERCENTERS achieved substantially the same result as the '073 patent.

To allow Shandon to escape infringement simply because it used separate cabinets, as opposed to a single cabinet, is the exact type of injustice the doctrine of equivalents prevents. *See Laitram Corp.*, 863 F.2d at 856-57. This court discerns no clear error in the district court's finding of infringement under the doctrine of equivalents.

The '460 Patent

The district court held claim 1 of the '460 patent invalid for obviousness under 35 U.S.C. Section 103 (1988). *Miles I*, slip op. at 16-17. The district court later held the dependent claims of the '460 patent (claims 2, 4-7) invalid by virtue of claim 1's invalidity. *Miles II*, slip op. at 2.

35 U.S.C. Section 103 -- Obviousness

The ultimate legal conclusion of obviousness is a question of law. *Specialty Composites v. Cabot Corp.*, 845 F.2d 981, 989, 6 USPQ2d 1601, 1606 (Fed. Cir. 1988). The analysis of obviousness, however, rests on several factual inquiries: (1) the scope and content of the prior art; (2) the differences between the prior art and the claims; (3) the level of ordinary skill in the art at the time of invention; and (4) objective evidence of nonobviousness. *Id.* (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1960)). This court reviews these factual underpinnings for the legal conclusion of obviousness under the "clearly erroneous" standard. *Specialty Composites*, 845 F.2d at 989. The facts stated herein are based on district court findings not found to be clearly erroneous or otherwise not in dispute.

The prior art in this instance included U.S. Patent No. 3,526,203 (the '203 patent), U.S. Patent No. 3,227,130 (the Weiskopf patent), and the Lipshaw Manufacturing Corporation's "Fluid X Changer." The '203 patent covers an electron microscopy tissue processor. Electron microscopy differs from light microscopy in that the former requires only very small tissue specimens. With small tissue specimens, electron microscopy does not need to reuse processing reagents. Nonetheless, the specification of the '203 patent provides: "it will be apparent that the processor of the invention may be used for processing the larger sized tissue particles which are intended for light microscopy examination." *Miles I*, slip op. at 10 (quoting U.S. Patent No. 3,526,203, col. 8, lines 5-8). The claims of the '203 patent disclose the vacuum component of the '460 patent. Furthermore, the '203 patent suggests a solution to the problem resolved by claim 1 of the '460 patent, namely, a means of reusing a solution by returning unused quantities to the storage container with pressure.

The specification of the '203 patent provides:

In this regard it should be noted that the practice in electron microscopy work is not to reuse the solutions and in the system of the invention only fresh solution is transferred through the lines and valves connecting the containers with the processing chamber. If the particular solutions are

required to be pumped back to the containers after use appropriate pumping and switching controls would have to be provided.

U.S. Patent NO. 3,526,203, col. 8, lines 12-19. Although electron microscopy does not reuse solutions, the '203 patent suggests to a skilled artisan the reuse of solutions by pumping them back to their storage containers.

The "Fluid X Changer" (a device used for sustaining slides bearing tissue specimens) also suggests transfer of solutions by pressure. Moreover, the Weiskopf patent discloses a tissue processor which transfers solutions by pressure controls. Thus, the prior art of histological equipment taught the flow of liquids in tissue processing apparatuses from one location to another with vacuum-pressure.

The differences between the prior art and claim 1 of the '460 patent were minor and achievable by simple modification. Moreover, the prior art references collectively suggest

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the engineering necessary to achieve these modifications. Simply put, the '203 patent discloses a tissue processor which does not reuse fluids but instead discharges them into a waste tank after processing. By running a line from the processing chamber back to the fluid storage containers (rather than to the waste tank), the '203 patent would anticipate the '460 patent.

[6] The level of ordinary skill in the art suggests as well a thorough knowledge of the principles of fluid transfer using pressure-vacuum pumps, valves, and conduits at the time of the '460 patent's development. Finally, Miles did not show objective indicia of non-obviousness. Such evidence, if present, would weigh in favor of non-obviousness, although the lack of such evidence does not weigh in favor of obviousness. *See, e.g., Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 1 USPQ2d 1196, 1199 (Fed. Cir. 1986). Miles presented no evidence, for instance, that its device represented a substantial share of any definable market. Miles also did not offer evidence on factors such as long-felt need or teaching away in the prior art.

[7] In sum, the district court concluded:

On the basis of the *Graham* test, therefore, we conclude that claim 1 of the '460 patent is invalid under 35 U.S.C. Section 103 because the subject matter of claim 1 as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains.

Miles I, slip op. at 16-17. This court finds no error (and certainly no clear error) with the district court's obviousness findings and conclusion. Therefore this court affirms the district court's determination of invalidity of claim 1 of the '460 patent.

In its later opinion, the district court clarified its earlier decision and also held dependent claims (2 and 4-7) of the '460 patent invalid. *Miles II*, slip op. at 1-2. Section 282 requires an independent analysis of the validity of each claim. 35 U.S.C. Section 282 (1988); *Ortho Pharmaceutical Corp. v. Smith*, 959 F.2d 936, 942, 22 USPQ2d 119, 1124 (Fed. Cir. 1992). A party challenging the validity of a claim, absent a pretrial agreement or stipulation, must submit evidence supporting a conclusion of invalidity for each contested claim. *Id.* Where the parties stipulate to "representative" claims, however, a validity resolution for the representative claims applies to the other claims as well. *See Panduit Corp. v. Dennison Mfg. Co.*, 836 F.2d 1329, 1330-31, 5 USPQ2d 1266, 1267-68 (Fed. Cir. 1987).

In an April 1988 pretrial "Stipulation of Agreed Fact, Law of the Case and Questions of Law," the parties agreed:

The '460 patent contains seven claims. Claim 1 is the only independent claim. Claims 2 through 7 depend directly or indirectly from claim 1. Consequently, claim 1 is the broadest claim and can be

considered to be representative of the claims in this patent.

Miles II, slip op. at 2 n.1. This stipulation of the parties made claim 1 a representative for the other claims in the patent. Thus, the parties, their counsel, and the trial court understood that the result the court reached for claim 1 would bind all other claims. Therefore, this court affirms the district court's invalidation of the dependent claims of the '460 patent.

The district court also determined that the accused device infringed the '460 patent. Because it affirms the district court's invalidity findings, this court need not reach the district court's infringement determination. See *Dana Corp. v. IPC Ltd. Partnership*, 860 F.2d 415, 417, 8 USPQ2d 1692, 1694 (Fed. Cir. 1988), *cert. denied*, 490 U.S. 1067 (1989).

CONCLUSION

For the above stated reasons, this court affirms the district court's findings of infringement of the '073 patent and the upholding of its validity. This court also affirms the district court's holding that claims 1, 2, and 4-7 of the '460 patent are invalid due to obviousness.

COSTS

Each party shall bear its own costs for this appeal.

AFFIRMED

Footnotes

Footnote *. U.S. Patent Reissue No. 29,073 issued on December 14, 1976 as a reissue of U.S. Patent No. 3,892,197, which issued on July 1, 1975).

- End of Case -